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EXAMINER

REZA, MOHAMMAD W

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/646,398	Applicant(s) SPRUNK, ERIC J.	
	Examiner Mohammad W. Reza	Art Unit 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/19/03-02/06/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-31 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In these claims applicants mentioned, **"encrypting first content using a first method that is cryptographically related to second decryption information"** which is generally narrative and indefinite with the invention. Applicants do not point out clearly which options include in the present invention by encrypting first content using a first method that is cryptographically related to second decryption information and how these steps perform in the invention. The office will interpret these limitations with the regarding claims as best understood for applying the appropriate art for rejection purposes.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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3. Claims 10, 16, and 20 are rejected under 35 U.S.C. 101 because the claim invention is directed to non-statutory subject matter. According to the specification of the invention (Page 1-12) a computer readable medium having instructions is reasonably interpreted by one of ordinary skill as just software, it is a system of software, per se. In this claim the function of the program is just software not any hardware. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. Similarly, computer programs claimed as computer instructions per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a

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computer which permit the computer program's functionality to be realized. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions. So, it does not appear that a claim reciting software with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowman et al hereafter Bowman (US patent 5999623).

5. As per claim 1, Bowman discloses a method comprising steps of: receiving provisioning information from a subset of the population of digital receivers indicating that the subset is potentially within range to receive digital television from a broadcaster (col. 1, lines 12-22); distributing first decryption information to the subset of the population of digital receivers (col. 1, lines 56-67, col. 2, lines 1-19, col. 6, lines 23-48), wherein: the first decryption information allows for potentially decrypting a plurality of programs coextensively in time (col. 2, lines 25-36), and the unauthorized digital receivers are cryptographically excluded from using the first decryption information (col. 1, lines 26-42, col. 6, lines 23-48, col. 17, lines 62-67); encrypting first content using a

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first method that is cryptographically related to second decryption information; sending the first content (col. 14, lines 43-67, col. 19, lines 38-59); and distributing the second decryption information that is cryptographically secured with the first decryption information (col. 6, lines 22-48, col. Col. 18, lines 9-36).

6. As per claim 2, Bowman discloses the method comprising steps of: encrypting second content using a second method that is cryptographically related to third decryption information, wherein at least one of an algorithm, a key and a key length of the second method is different from that of the first method (col. 14, lines 43-67, col. 19, lines 38-59); sending the second content; and distributing third decryption information that is cryptographically secured with the first decryption information (col. 6, lines 22-48, col. Col. 18, lines 9-36).

7. As per claim 3, Bowman discloses the method comprising a step of uniquely encrypting the first decryption information for each of the subset, wherein the first-listed distributing step comprises sending first description information uniquely encrypted for each of the subset (col. 14, lines 43-67, col. 19, lines 38-59).

8. As per claim 4, Bowman discloses the method comprising a step of determining the unauthorized digital receivers to exclude from the subset of the population of digital receivers (col. 1, lines 26-42, col. 6, lines 23-48, col. 17, lines 62-67).

9. As per claim 5, Bowman discloses the method, wherein the first decryption information is uniquely encrypted for each of the subset (col. 1, lines 56-67, col. 2, lines 1-19, col. 6, lines 23-48).

10. As per claim 6, Bowman discloses the method wherein the first decryption information comprises a key for decrypting the second decryption information (col. 14, lines 43-67, col. 19, lines 38-59).
11. As per claim 7, Bowman discloses the method, wherein the first decryption information expires by changing keys, key lengths and/or algorithms used to encrypt the first content (col. 1, lines 56-67, col. 2, lines 1-19, col. 6, lines 23-48).
12. As per claim 8, Bowman discloses the method comprising a step of forwarding the provisioning information to another broadcaster within range of one of the subset (col. 1, lines 12-22).
13. As per claim 9, Bowman discloses the method, where each digital receiver in the population has the unique identifier as recited in claim 1, wherein the unique identifier includes a key (col. 1, lines 56-67, col. 2, lines 1-19, col. 6, lines 23-48).
14. As per claim 10-11, Bowman discloses a computer-readable medium protecting television from unauthorized digital receivers within the population of digital receivers of claim 1, and method for protecting digital television from unauthorized digital receivers within the population of digital receivers of claim 1.
15. As per claim 12, Bowman discloses a method comprising steps of: sending provisioning information from a subset of the population of digital receivers indicating that the subset is within range to receive digital television from a broadcaster (col. 1, lines 12-22); receiving first decryption information with the subset of the population of digital receivers (col. 1, lines 56-67, col. 2, lines 1-19, col. 6, lines 23-48), wherein: the first decryption information allows for potentially decrypting a plurality of programs

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coextensively in time (col. 2, lines 25-36), and the unauthorized digital receivers are cryptographically excluded from using the first decryption information (col. 1, lines 26-42, col. 6, lines 23-48, col. 17, lines 62-67); receiving first content; receiving second decryption information that is cryptographically secured with the first decryption information (col. 6, lines 22-48, col. Col. 18, lines 9-36); and decrypting the first content using a first method that is cryptographically related to the second decryption information (col. 14, lines 43-67, col. 19, lines 38-59).

16. As per claim 13, Bowman discloses the method comprising steps of: receiving second content; receiving third decryption information that is cryptographically secured with the first decryption information (col. 6, lines 22-48, col. Col. 18, lines 9-36); and decrypting the second content using a second method that is cryptographically related to the third decryption information, wherein at least one of an algorithm, a key and a key length of the second method is different from that of the first method (col. 14, lines 43-67, col. 19, lines 38-59).

17. As per claim 14, Bowman discloses the method, where each digital receiver in the population has the unique identifier as recited in claim 12, wherein the first decryption information is uniquely encrypted for each of the subset (col. 14, lines 43-67, col. 19, lines 38-59).

18. As per claim 15, Bowman discloses the method, where each digital receiver in the population has the unique identifier as recited in claim 12, wherein the unique identifier includes a key (col. 1, lines 56-67, col. 2, lines 1-19, col. 6, lines 23-48).

19. As per claim 16-17, Bowman discloses a computer-readable medium for processing digital television within the population of digital receivers of claim and a computer system adapted to perform the computer-implementable method for processing digital television within the population of digital receivers of claim 12 (col. 1, lines 12-22).

20. As per claim 18, Bowman discloses a method comprising steps of: determining a first subset of the population of digital receivers, wherein the first subset is within range to receive digital television from a broadcaster (col. 1, lines 12-22); distributing first decryption information to the first subset of the population of digital receivers (col. 1, lines 56-67, col. 2, lines 1-19, col. 6, lines 23-48), wherein: the first decryption information is uniquely encrypted for each of the first subset (col. 2, lines 25-36), and the first decryption information expires at some future time; encrypting first content that is cryptographically protected from use by digital receivers without the first decryption information (col. 1, lines 26-42, col. 6, lines 23-48, col. 17, lines 62-67); sending the first content in encrypted form; determining the unauthorized digital receivers to exclude from the first subset to find a second subset of the population of digital receivers, and sending the second content in encrypted form after the first decryption information has expired (col. 6, lines 22-48, col. Col. 18, lines 9-36); distributing second decryption information to the second subset of the population of digital receivers, wherein the second decryption information is uniquely encrypted for each of the second subset (col. 1, lines 56-67, col. 2, lines 1-19, col. 6, lines 23-48); encrypting second content that is

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cryptographically protected from use by digital receivers without the second decryption information (col. 14, lines 43-67, col. 19, lines 38-59).

21. As per claim 19, Bowman discloses the method, wherein the first and second decryption information assists in decrypting messages with keys that allow decrypting the first content (col. 1, lines 56-67, col. 2, lines 1-19, col. 6, lines 23-48).

22. As per claim 20-21, Bowman discloses a computer-readable medium for protecting digital television from unauthorized digital receivers within the population of digital receivers of claim 18, and a computer system for protecting digital television from unauthorized digital receivers within the population of digital receivers of claim 18 (col. 1, lines 56-67, col. 2, lines 1-19, col. 6, lines 23-48).

23. As per claim 22, Bowman discloses a content receiver comprising: provisioning information that is sent away from the content receiver for a plurality of content broadcasters coupled to the content receiver (col. 1, lines 12-22); first decryption information received from a point remote to the content receiver, wherein an unauthorized content receiver is excluded from using the first decryption information (col. 1, lines 26-42, col. 6, lines 23-48, col. 17, lines 62-67); an interface coupled to content signals broadcast to a plurality of content receivers, wherein the content signals carry a plurality of programs coextensively in time (col. 2, lines 25-36); second decryption information received from a place remote to the content receiver, wherein the second decryption information is cryptographically secured with the first decryption information (col. 14, lines 43-67, col. 19, lines 38-59); and first content received with the

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interface, wherein the first content is decrypted with a method related to the second decryption information (col. 1, lines 56-67, col. 2, lines 1-19, col. 6, lines 23-48).

24. As per claim 23, Bowman discloses the content receiver, wherein the content signals are protected by a plurality of encryption keys (col. 1, lines 56-67, col. 2, lines 1-19, col. 6, lines 23-48).

25. As per claim 24, Bowman discloses the content receiver, wherein the first decryption information includes a category key (col. 1, lines 56-67, col. 2, lines 1-19, col. 6, lines 23-48).

26. As per claim 25, Bowman discloses the content receiver, wherein the first decryption information includes a category key (col. 2, lines 25-36).

27. As per claim 26, Bowman discloses the content receiver, wherein the second decryption information includes a content key (col. 1, lines 12-22).

28. As per claim 27, Bowman discloses the content receiver, wherein the first decryption information expires after a period of time (col. 6, lines 22-48, col. Col. 18, lines 9-36).

29. As per claim 28, Bowman discloses the content receiver for protecting content that is transmitted with digital encoding as recited in claim 27, wherein the period of time is two hours, one day, one week, one month, or one year (col. 6, lines 22-48, col. Col. 18, lines 9-36).

30. As per claim 29, Bowman discloses the content receiver, wherein the first decryption information is uniquely encrypted for each of a plurality of content receivers in a system (col. 1, lines 26-42, col. 6, lines 23-48, col. 17, lines 62-67).

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31. As per claim 30, Bowman discloses the content receiver comprising a plurality of content keys, wherein the first content is protected with one of the plurality of content keys (col. 1, lines 56-67, col. 2, lines 1-19, col. 6, lines 23-48).

32. As per claim 31, Bowman discloses the content receiver, wherein the first decryption information includes a category key (col. 1, lines 12-22).

Conclusion

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad w. Reza whose telephone number is 571-272-6590. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MOAZZAMI NASSER G can be reached on (571)272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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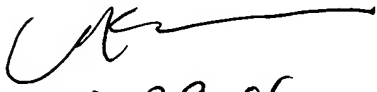
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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohammad Wasim Reza

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10/29/06